

### **REMARKS/ARGUMENTS**

This case has been carefully reviewed and analyzed in view of the Office Action dated 2 October 2007. Responsive to the objections and rejections made in the Office Action, Claims 1-3 and 15 have been amended for further prosecution with the other Claims remaining pending. It is believed that with such amendment of Claims, there are further clarifications of their recitations.

In the Office Action, the Examiner objected to the Disclosure due to informalities found therein. In response to this objection, the Specification has been amended to correct the informalities found therein.

In the Office Action, the Examiner has objected to Claims 2-3 and 15 due to informalities found therein. In response to this objection, the appropriate Claims have been amended to correct the informalities found therein.

In the Office Action, the Examiner rejected Claim 3 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Accordingly, Claim 3 has been amended to provide the necessary clarification thereto. It is now believed that the Claim particularly point out and distinctly claim the subject matter that the Applicant regards as the invention.

In the Office Action, the Examiner rejected Claims 1-15 under 35 U.S.C. § 102(e) as being anticipated by the Allen, et al. reference, U.S. Patent Publication 2004/0236224.

Before discussing the prior art relied upon by the Examiner, it is believed beneficial to first briefly review the structure of the invention of the subject Patent Application, as now claimed. The invention of the subject Patent Application is directed to the structure for a biochemical sensing device. A biochemical sensing device includes a bearing body which bears a reagent thereon where the reagent contains a specific compound that has a first enzyme, a second enzyme, and a luminal in which the specific compound in the first enzyme will produce a reaction that will generate  $H_2O_2$ . The  $H_2O_2$  and the second enzyme with the luminol will produce a chemiluminescent reaction.

The sensing apparatus importantly includes a sensing element where a complimentary metal oxide semiconductor (CMOS) is used to actuate the process of sensing the chemiluminescent reaction. The CMOS has a photodiode and a current/voltage converting circuit. The sensing element senses the light generated by the chemiluminescent reaction as well as converting the sense optical signal into a current signal. The current/voltage converting circuit is capable of converting the current signal into a voltage signal. An electronic device can receive and process the voltage signal source in order to perform a quantitative analysis on the specific compound.

It is respectfully submitted that the Allen, et al. reference shows in Fig. 1 a hand-held medical apparatus (10) comprises a housing (12). The apparatus (10) has an inlet (14) in communication with the conduit (15). An electrochemical

biosensor (16) preferably comprising a working electrode, a counter electrode and reference electrode, is in electrical communication with the sensing electrical circuit (17). The sensing electrical circuit (17) is in electrical communication with an analog to digital converter (18). A constant voltage circuit (19) is in electrical communication with the sensing electrical circuit (17) and the analog to digital converter (18). A battery, not shown, is used to power the hand-held medical apparatus (10) and, of course, other power sources can be used such as a converter. The digital signal from the analog digital converter (18) is communicated to a microprocessor (20). The microprocessor (20) is in electrical communication with a liquid crystal display (21) and a personal data system (22).

The Allen, et al. reference does provide for a hand-held medical apparatus for detecting a predetermined component of user's breath and producing a breath component signal over a measurement of time. However, the Allen, et al. reference is not directed to a biochemical sensor that has a complimentary metal oxide semiconductor (CMOS) that is used to actuate the process of sensing the chemiluminescent reaction where the CMOS has a photo diode and a current/voltage converting circuit.

Thus, the Allen, et al. reference does not provide for: "... a sensing element ... a complimentary metal oxide semiconductor (CMOS) is used to actuate the process of sensing the chemiluminescent reaction ...", nor does it provide for: "... the CMOS having a photodiode and a current/voltage converting circuit ...", as is

clearly seen in now amended independent Claim 1. Thus, the Allen, et al. reference does not provide for the elements as provided in now amended Claim 1 for the objects and purposes of the subject Patent Application.

The Allen, et al.'s device uses several mechanisms to sense the biochemical reaction, whereas the subject Patent Application uses a singular microchips such as the CMOS to sense the chemiluminescent reaction. The Allen, et al. reference does not use a CMOS sensing chip fabricated by a sophisticated CMOS process. Among other things, the CMOS sensing chip has many advantages such as being small in size, inexpensive, and suitable for mass production. Further, the analog, digital converter can be integrated with the CMOS sensing chip for the electric device providing an inexpensive product that has a precise convenient real-time assay feature so that a user is able to perform a self-diagnostic examination without being treated by a health professional.

Thus as the Allen, et al. fails to disclose each and every one of the elements of the subject Patent Application, it is not believed to anticipate the invention as now claimed. Further, as the reference fails to suggest the combination of elements providing the advantage as discussed, it is not believed to make obvious that claimed invention.

Given such deficient teachings of the primarily-cited Allen, et al. reference, this reference is found to be quite ineffectual to the present patentability analysis.

The remaining Claims are all ultimately dependent on now amended Claim

1 and are believed to be patentable over the prior art for at least the same reasons as discussed above.

It is now believed that the subject Patent Application has been placed in condition for allowance and such action is respectfully requested.

No fees are believed to be due with this Amendment. If there are any further charges associated with this filing, the Honorable Commissioner for Patents is hereby authorized to charge Deposit Account #18-2011 for such charges.

Respectfully submitted,  
For: ROSENBERG, KLEIN & LEE

/Morton J. Rosenberg/

Morton J. Rosenberg  
Registration #26,049

Dated: 28 December 2007

Suite 101  
3458 Ellicott Center Drive  
Ellicott City, MD 21043  
(410) 465-6678  
**Customer No. 04586**

**CERTIFICATE OF ELECTRONIC TRANSMISSION**

I hereby certify that this paper is being transmitted electronically to the U.S. Patent and Trademark Office, Art Unit # 1743, on the date shown below.  
For: ROSENBERG, KLEIN & LEE

/David I. Klein/  
DAVID I. KLEIN

12/28/2007  
Date